CLAIMS:

1. An engine comprising:

a block,

an output shaft mounted to rotate within the block,

a profiled cam attached to or formed integrally with the output shaft,

a plurality of bores in the block extending substantially radially from the output shaft,

a respective reciprocating piston within each bore and defining an expansion volume within the bore at one side thereof,

a respective fixed push bar extending from each piston toward the output shaft and interacting with the profiled cam to effect rotation thereof, and

inlet and exhaust ports communicating with the expansion volume.

2. The engine of Claim 1, further comprising a valve at each inlet port.

2. The engine of Claim 1, comprising a combustion manifold within which a pressurised fuel-air mixture ignites.

3. The engine of Claim 2, for the comprising a compressor for compressing an air-fuel mixture within the manifold.

4. The engine of Claim 2, further comprising ignition means for igniting a fuel-air mixture within the combustion manifold.

5. The engine of Claim 4, wherein the ignition means comprises a pilot light, glow plug or the like. The fuel/air mixture is ignited once and continues to glow so long as air and fuel is delivered to the combustion manifold.

6. The engine of Claim 1, wherein the profiled cam comprises a plurality of circumstantially spaced lobes.

7. The engine of Claim 6, wherein each lobe has a convex side and a concave side.

8. the end of Claim 1 wherein the push bar is offset so as not to point directly at the output shaft.

9. The engine of Claim 1, wherein the exhaust ports extended from a side of each bore at a position below that at which the respective piston minimises the expansion volume.

10. The engine of Claim 1, further comprising a roller or slider at an end of each connecting rod for rolling or sliding contact with the profiled cam.

11. The engine of Claim 10, further comprising a pair of said rollers or sliders at an end of each connecting rod.